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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/521,825

08/15/2005

Alain Chenede

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7590

08/29/2006

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EXAMINER

PUTTLITZ, KARL J

ART UNIT

PAPER NUMBER

1621

DATE MAILED: 08/29/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	10/521,825	CHENEDE ET AL.	
	<b>Examiner</b>	<b>Art Unit</b>	
	Karl J. Puttlitz	1621	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 21 January 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 32-62 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 32-36 and 38-62 is/are rejected.
- 7) ☒ Claim(s) 37 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☒ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

***Claim Rejections - 35 USC § 112***

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 32-62 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 32, for example, fails to recite the structure of the ester product.

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

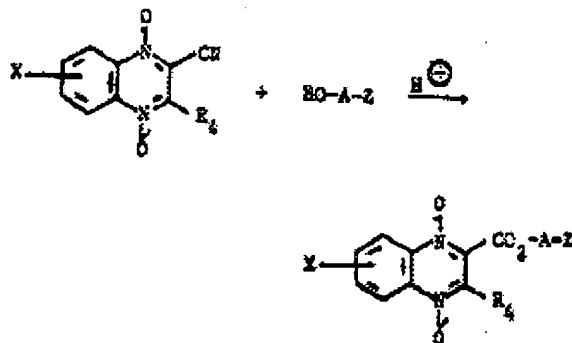
(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1, 41, 42-44 and 48-60 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No. 3,915,975 to Cronin et al. (Cronin).

The rejected claims cover a method for preparing an ester of an aromatic carboxylic acid bearing at least one perfluoroalkyl group on the aromatic ring, comprising the steps of: a) reacting an aromatic compound bearing at least one perfluoroalkyl group and at least one nitrile group on the aromatic ring, an alkanol and a strong protonic acid, at a temperature of at least 45 C., and b) recovering the ester obtained from the reaction medium of step a).

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With regard to the above embodiments, Cronin teaches the following reaction:



See column 9 and definitions at

column 2.

Cronin fails to explicitly teach those exact reaction conditions and separation steps recited in the claims. However, these steps are well within the skill of those of ordinary skill for the purpose of optimization of the process, and are therefore, *prima facie* obvious.

Claims 32-36 and 38-62 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No. 4,868,333 to Dinizo et al. (Dinizo) in view of U.S. Patent No 4,307,113 to Anderson (Anderson).

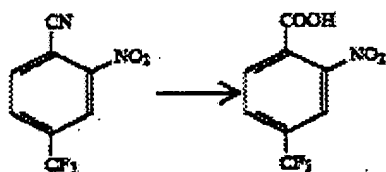
The rejected claim cover those embodiments wherein the aromatic compound bearing at least one nitrile group and at least one perfluoroalkyl group corresponds to general formula:

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wherein A represents the residue of a benzene or naphthalene ring.

With regard to the above embodiments, Dinizo teaches the following reaction at column 1 with sulfuric acid.



Dinizo fails to explicitly teach the preparation of esters of the above compounds. However, it is for this proposition that the examiner joins Anderson, which teaches preparation of ethyl esters example 3 via acid amides in example 1. In this regard, the claims do not require a one step reaction. Those of ordinary skill would have been motivated to modify the disclosure of Dinizo to include the preparation of the esters since Anderson teaches that these compounds are useful in pharmaceutical preparations. Therefore, the combination of Dinizo and Anderson renders the rejected claims *prima facie* obvious since these references teach or suggest the elements of the claims with a reasonable expectation of success.

The examiner notes that the recited reaction conditions and separation steps are well within the skill of those of ordinary skill for the purpose of optimization of the process, and are therefore, *prima facie* obvious.

### ***Claim Objections***

Claim 37 is objected to for dependence on one or more rejected claims but would be allowable if rewritten in independent for including all limitations of intervening claims. In this regard a search of the prior art failed to uncover a reference using m-trifluoromethylbenzonitril as a reagent. The search also failed to uncover a reference that would have motivated those of ordinary skill to modify a known process for producing th reited aromatic carboxylic acid esters using a m-trifluoromethylbenzonitril as a reagent.

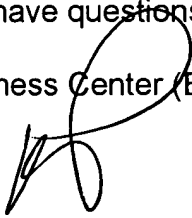
### ***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Karl J. Puttlitz whose telephone number is (571) 272-0645. The examiner can normally be reached on Monday to Friday from 9 a.m. to 5 p.m.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Thurman K. Page, can be reached at telephone number (571) 272-0602. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

A handwritten signature in black ink, appearing to read 'K. Puttlitz', is written over the text 'Business Center (EBC)'.

Karl J. Puttlitz  
*Assistant Examiner*